

REMARKS

Applicants respectfully request reconsideration of this application, and reconsideration of the Office Action dated September 9, 2003 (Paper No. 13). Upon entry of this Amendment, claims 5 and 8-30 will remain pending in this application with claims 12-26 and 28-30 having been withdrawn. Claims 1-4, 6, and 7 are cancelled by this Amendment and new claims 31-47 are added. The amendments to the claims are supported by the specification and original claims. The newly added claims are also supported by the specification. For example, newly added claim 34 finds support at page 6, paragraph [0022]; claim 36 finds support at page 10, paragraph [0037]; claim 38 is supported by the Sequence Listing; and claim 39 finds support at page 5, paragraph [0017]. No new matter is incorporated by this Amendment. Payment to cover the fees associated with the additional claims, including the new multiple dependent claim, is also submitted herewith.

Applicants note the Examiner's comments with respect to the priority document. Applicants submit herewith a certified translation of priority document appln. no. 100 42 051.6. Hence, applicants respectfully submit the claims of the present application are entitled to the August 26, 2000 priority date.

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The abstract is objected to for purportedly not completely describing the disclosed subject matter. In addition, the Office Action noted an inconsistency with respect to the written description and the abstract. In response, Applicants submit herewith a new Abstract of the Disclosure which includes the information suggested by the Examiner and corrects the inconsistency.

In addition, the Office Action asserts that SEQ ID NO: 5 is listed in the Sequence Listing but not described in the written description. In response, Applicants have inserted a description of SEQ ID NO: 5 into the specification. The brief description of SEQ ID NO: 5

inserted into the specification is fully supported by the Sequence Listing and thus does not introduce new matter.

In view of the above remarks, Applicants respectfully submit the objection is overcome and its withdrawal is respectfully requested.

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Claim 5 is objected to for depending from a rejected base claim. In response, claim 5 has been amended by rewriting it in independent form. Hence, claim 5 is believed to be in condition for allowance.

Claim 8 is also objected to for containing a typographical error. In response, claim 8 has been amended to correct the typographical error. Hence, this objection is also overcome and its withdrawal is respectfully requested.

* * *

Claims 1-4, 6, 7, 9-11 and 27 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Applicants respectfully traverse.

As an initial matter, Applicants note that claims 1-4, 6, and 7 have been cancelled by this Amendment.

In preparing this Amendment, Applicants have carefully reviewed the claims, taking into consideration the various issues raised by the Examiner in the Office Action. In general, the newly added claims have been prepared in a manner to address the Examiner's concerns regarding clarity as set forth in the Office Action. In particular, claim 9 has been amended to recite a SEQ ID NO:. Claim 11 has been amended as suggested by the Examiner. Furthermore, claim 27 has been amended to depend from claim 5 which refers to a SEQ ID NO: and, as stated above, is believed to be in condition for allowance. Hence, in view of the above remarks, Applicants respectfully submit the rejection is overcome and its withdrawal is respectfully requested.

With respect to the phrase “carbon starvation protein A activity”, Applicants make the following remarks. Applicants file herewith an Information Disclosure Statement which lists an article, that was published before the filing date of the present application, which describes the function of carbon starvation protein A (cstA). The article describes a cstA protein that was isolated from *E. coli* which belongs to the cstA family and teaches that cstA proteins have the function of protein utilization during carbon starvation. Hence, in view of the article, those of ordinary skill in the art would be presumed to know what is intended by the phrase “carbon starvation protein A activity.”

* * *

Claims 1-4, 6, 7, and 27 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is purportedly not adequately described by the specification. Applicants respectfully traverse.

Applicants again point out that claims 1-4, 6, and 7 have been cancelled by this Amendment. With respect to claim 27, as stated above, claim 27 has been amended to depend from claim 5 which refers to a SEQ ID NO: and, as stated above, is believed to be in condition for allowance.

* * *

Claims 9 and 10 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is purportedly not adequately described by the specification. Applicants also respectfully traverse this rejection.

The Office Action asserts claim 9 is drawn to a bacterium having enhanced cstA gene that is claimed solely by function without any structural limitations. Claim 9 has been amended to recite, “A transformed coryneform bacterium comprising an isolated cstA gene having the polynucleotide sequence of SEQ ID NO: 1.” In addition, claim 10 recites that “the cstA gene is over-expressed.” Applicants submit that the subject matter of claims 9 and 10 are adequately described by the specification by both structure (SEQ ID NO:) and

function. For example, the specification describes that when the cstA gene of the present invention is over-expressed in bacteria, the bacteria are useful in methods of producing L-amino acids. *See page 6, paragraph [0023]*.

Accordingly, in view of the above remarks, the rejection is overcome and its withdrawal is respectfully requested.

* * *

Claims 1-4, 6, 7, 9, 10 and 27 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is purportedly not fully enabled by the specification. Applicants respectfully traverse.

As stated above, claims 1-4, 6, and 7 have been cancelled by this Amendment, and claim 27 has been amended to depend from claim 5 which is believed to be in condition for allowance.

With respect to claims 9 and 10, these two claims have been amended to refer to SEQ ID NO: 1 which is fully enabled by the specification. Hence, the rejection is overcome and its withdrawal is respectfully requested.

With respect to newly added claims 33 and 34, Applicants make the following remarks. While these claims refer to polynucleotides having at least 81% (91%) identity to the polynucleotide of SEQ ID NO: 1, the claims also recite that the polynucleotide encodes a protein comprising the amino acid sequence of SEQ ID NO: 2, and that the protein has carbon starvation protein A activity. Applicants respectfully submit that those of ordinary skill in the art, after reading the present specification, would be able to determine, without undue experimentation, which proteins are 81% to 91% identical to SEQ ID NO:1 and encode SEQ ID NO: 2. Hence, newly added claims 33 and 34 are fully supported by the present specification.

* * *

Claims 9 and 10 are also rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is purportedly not fully enabled by the specification.

Applicants again respectfully traverse.

The Office Action asserts the specification is enabling for a coryneform bacterium comprising an over-expression vector containing the *cstA* gene. In response, claim 9 has been amended to recite, “A recombinant coryneform bacterium comprising an isolated *cstA* gene having the polynucleotide sequence of SEQ ID NO: 1.” The specification fully describes how to make such a bacterium. See Examples 1-4. Hence, the rejection is overcome and its withdrawal is respectfully requested.

* * *

Claim 11 is rejected under 35 U.S.C. § 112 , first paragraph, as containing subject matter that is purportedly not enabled by the specification. The Office Action asserts that the specification fails to fully comply with the requirements for deposited microorganisms. Applicants respectfully traverse.

The specification contains the accession number, a brief description of the deposit, and the name of the depository and states that the deposit has been accepted for deposit under the Budapest Treaty. See page 18, paragraph [0059]. The specification has also been amended to include the complete depository address. All restriction on the availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent. The above Remarks overcome this rejection. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

* * *

Claims 1-4, 6-10, and 27 are rejected under 35 U.S.C. § 102(a) as anticipated by Pomejus et al. (WO 1/00804).

Claims 1-4, 6-10, and 27 are rejected under 35 U.S.C. § 102(a) as anticipated by Nagakawa et al. (EP 1108790). Applicants note that claims 1-4, 6, and 7 have been cancelled.

These two rejections are addressed together as similar issues apply to both. Moreover, both rejections are respectfully traversed.

Applicants submit herewith a certified translation of foreign priority document appln. no. 100 42 051.6, filed on August 26, 2000. The present specification claims the benefit of this priority document. Furthermore, the subject matter of 8-10, and 27 is supported by the priority document. Hence, claims 8-10, and 27 are entitled to a priority date of August 26, 2000. Pomejus et al. (WO 1/00804) is entitled to a date of January 4, 2001 and Nakagawa et al. (EP 1108790) is entitled to a date of June 20, 2001. Hence, in view of the certified translation of the priority document, both Pomejus et al. and Nagakawa fail to qualify as prior art. Applicants submit that both rejections are thus overcome and withdrawal of each is respectfully requested.

* * *

Claims 1-3, 6 and 7 are rejected under 35 U.S.C. § 102(a) as anticipated by Cole et al. (Nature 1998). The claims listed in this rejection have been cancelled thereby rendering this rejection moot.

However, insofar as the rejection is deemed to be applicable to the newly added claims, Applicants make the following remarks. The Office Action asserts Cole describes a polynucleotide sequence having 29 consecutive nucleotides that are identical to SEQ ID NO: 1. Newly added claim 39 recites "An isolated polynucleotide comprising at least 30 consecutive nucleotides selected from SEQ ID NO: 1" Hence, Cole does not teach or fairly suggest such a nucleotide sequence. The remaining newly added claims refer to

specific SEQ ID NOs (claims 33 and 34 each recite a sequence having a particular identity percentage to the SEQ ID NO: and which encodes a particular amino acid sequence and has recited activity) which are neither taught nor fairly suggested by Cole. Hence, Cole does not anticipate the present claims.

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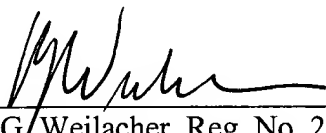
Applicants respectfully submit that this Amendment and the above remarks obviate the outstanding objections and rejections in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C.F.R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300; Order No. 032301.195.

If an extension of time under 37 C.F.R. § 1.136 is necessary that is not accounted for in the papers filed herewith, such an extension is requested. The extension fee should be charged to Deposit Account No. 02-4300; Order No. 032301.195.

Respectfully submitted,
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